

SHORT NOTE

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Aligning agricultural policy: discrepancies between public and farmer priorities

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Abstract

Agricultural policy in Europe is the subject of extensive debate due to the unmet agri-environmental goals, despite high levels of support. For example, the public is critical of agriculture's impact on the environment and animal welfare. At the same time, farmers protest due to low incomes and high bureaucracy. This apparent polarisation may hinder progress in agricultural policy reform, and a more nuanced understanding of the perceptions of both non-farmers and farmers is needed. This study systematically compares non-farmers' and farmers' preferences and levels of consensus across a comprehensive set of agricultural policy goals using surveys in Switzerland (N = 1668). We also assess the polarisation among farmers, non-farmers, and the entire population. We find consensus and polarisation in the perception of agricultural policy goals among Swiss farmers and the general public. Both prioritise domestic food production and farmers' income as main policy goals. However, non-farmers put more emphasis on low food prices and agri-environmental goals than farmers. We find strong divides within the farming population, particularly regarding the need to mitigate climate change. Our analysis provides key insights for policymakers. Firstly, the broad consensus on different agricultural policy goals underlines the legitimacy of focusing on multiple objectives that support the multifunctional role of agriculture. Secondly, farmers are not homogeneous but have differing views, particularly regarding environmental objectives, especially those related to reducing greenhouse gas emissions. Policies need to take this heterogeneity into account, for example, by more efficient allocation of agri-environmental payments. Thirdly, while farmers and non-farmers generally agree on the importance of securing farmers' incomes and food production, there are divergent views when it comes to reducing food prices and environmental impacts. Future agricultural policy reforms must find a balance between environmental goals and safeguarding farmers' incomes, while also ensuring affordable food prices.

Keywords: Consensus, Polarization, Survey, Policy perception, Agriculture

Background

Agricultural policy in Europe is currently the subject of a major public debate, as many of the agri-environmental goals are not being achieved despite high investments (Huber and Finger 2019; Pe'er et al., 2019). At the same time, farmers complain about a lack of entrepreneurial freedom, low incomes, and high administrative burdens (Mack et al.

2020; Navarro and López-Bao 2018), which was reflected in protests conducted in 2023–2024 (Matthews 2024; Finger et al. 2024). Citizens protest in favour of animal welfare and the environment (Fisher and Nasrin 2020; Huber and Finger 2019; Van Straalen and Legler 2018). Furthermore, increasing food prices, e.g. due to the war in Ukraine, have increased uncertainty regarding the affordability of food (Matthews 2023). The polarisation of the population at large appears to be increasing, while much-needed political reforms are currently on hold (Matthews 2023). A better understanding of farmers' and non-farmers' policy preferences is needed to overcome this situation and to develop agricultural policy reforms that are acceptable to the majority of people and decision makers. The existing literature has mainly assessed citizens' perceptions of agricultural policy goals (Ammann et al. 2023, 2024; El Benni et al. 2024a, b; Tosun et al. 2023). Existing comparisons between citizens and farmers focused on only a few policy goals or specific circumstances (Biedny et al. 2020; Howley et al. 2014; Mittenzwei et al. 2023; Noack et al. 2024; Tienhaara et al. 2020; Winter 2005). No previous study has directly compared farmers' and non-farmers' preferences and (dis)consensus for a wide range of agricultural policy goals. We here aim to fill this gap by providing a systematic comparison of non-farmers' and farmers' preferences and levels of consensus across a comprehensive set of agricultural policy goals using surveys (N=1668) in Switzerland.

In Switzerland, several goals, such as environmental and income goals, are not being achieved with the current agricultural policy (Huber et al. 2024; Matthews 2024). While there is agreement on the need for reform, there is no consensus on its direction (e.g. focusing on food production or environmental protection) or on specific measures. Although the Swiss case cannot be generalised one-to-one, Switzerland's situation has analogies to the EU's Common Agricultural Policy, e.g. in terms of policy goals and goals not being met. Moreover, protests by farmers across Europe in 2024 have brought agricultural policy into the spotlight and forced policymakers to reconsider their ambitious environmental targets (Matthews 2024; Finger et al. 2024). The agricultural policy goals we consider in this study stem from the Swiss Constitution Article 104 (Swiss Federal Constitution, 1999, status as of 13 February 2022) and the corresponding laws, current policy reforms, and societal discussions on political initiatives related to agricultural issues. According to Art. 104, 'The Confederation shall ensure that the agricultural sector, by means of a sustainable and market-oriented production policy, makes an essential contribution towards: (a) the reliable provision of the population with foodstuffs, (b) the conservation of natural resources and the upkeep of the countryside, (c) decentralised population settlement of the country'. Furthermore, the Confederation is responsible for 'supplementing revenues from agriculture by means of direct subsidies in order to achieve of fair and adequate remuneration for the services provided, subject to proof of compliance with ecological requirements' and 'for protecting the environment against the detrimental effects of the excessive use of fertilisers, chemicals and other auxiliary agents'.

Swiss citizens are generally very well informed about current political debates. For example, the political discussion platform ARENA regularly debates initiatives on public television that will soon be put to a vote. Politicians, association representatives and opinion leaders from business and society engage in discussions about the initiatives' impacts. This activity is complemented by a public recommendation by the Federal

Council to Parliament, explanatory videos, newspaper articles, and public appearances by the initiators and opponents at political and popular events. In a direct democracy, these instruments play a key role for preparing the population for referendums, as they provide comprehensive information on the respective topic from different perspectives. Over the last two decades, various popular initiatives have been launched on agricultural policy issues, in which citizens propose amendments of the Federal Constitution (Huber and Finger 2019). These initiatives mainly address issues such as environmental and animal welfare improvements, which are pitted against consumer prices and farmers' incomes, putting these policy objectives in conflict. Most of the initiatives have been rejected by Swiss voters but they had a significant impact on the political debate and led to the strengthening of agricultural legislation, for example by forcing compromises. For instance, pesticide and nutrient policies were strengthened with the aim of reducing nitrogen and phosphorus surpluses by 20% until 2030 and halving the risks associated with the use of plant protection products by 2027 (Mack et al. 2023; Dueri and Mack 2024). Furthermore, the Swiss Federation formulated a climate strategy for agriculture (FOAG et al. 2023), initiated a discussion for the upcoming policy reform that goes from an agriculture to a food policy (FOAG 2023), and signed the Convention on Biological Diversity and the Global Biodiversity Framework in December 2022.

Based on this background, farmers' and non-farmers' perception of eight policy goals were analysed and compared in this study: (1) reducing nutrient surpluses, (2) reducing greenhouse gas emissions, (3) reducing the use of plant protection products, (4) promoting species richness/biodiversity, (5) increasing animal welfare, (6) increasing domestic food production, (7) reducing (consumer) food prices, and (8) ensuring an adequate income for farmers.¹

Empirical approach

We combine two surveys, i.e. one with farmers and one with non-farmers in the German- and French-speaking part of Switzerland (see Table 1 below).

Farmers' perception of agricultural policy goals was assessed by a paper-and-pencil and online survey provided to 2000 farmers, stratified by agricultural zone and farm type based on the Swiss agricultural census. The questions were part of a bigger study that investigated the importance of biodiversity conservation. Data were collected from June to August 2023. The survey response rate was 44% (N=882), and after deleting observations with missing values, a total of 820 farmers' responses were analysed in this study. The sample is representative of the French- and German-speaking Swiss farm population in 2022 in terms of agricultural zone, farm type, production system, and farm size (see more details in Kaiser et al. 2025).

To assess citizens' perception of agricultural policy goals, data from an online survey with 848 representative participants recruited by a commercial and certified panel provider was used. Data collection followed a quota of gender, age and language region, whereby we here present the data of the German- and French-speaking participants. The

¹ We have not considered the goal of decentralised settlement, as this is less relevant to current discussions on agricultural policy than economic and environmental goals, and no initiatives or referenda have been taken in this regard (Ammann et al. 2024; Huber and Finger 2019).

Table 1 Descriptive statistics of the farmer sample, non-farmer sample, and whole sample

	Farmer sample N = 820 49.16%	Non-farmer sample N = 848 50.84%	Whole sample N = 1668
Age in years mean	48.63	46.95	47.78
Standard deviation (SD)	SD = 10.45	SD = 15.57	SD = 13.33
Gender			
Male no. of obs	739	380	1119
Share of total	90.12%	44.81%	67.09%
Female no. of obs	81	468	549
Share of total	9.88%	55.19%	32.91%
Language region			
French-speaking no. of obs	133	413	546
Share of total	16.22%	48.70%	32.73%
German-speaking no. of obs	687	435	1122
Share of total	83.78%	51.30%	67.27%
Education			
Low (number of observations) ^a	44	33	77
Share of total	5.37%	3.89%	4.62%
Medium low no. of obs. ^b	525	459	984
Share of total	64.02%	54.13%	58.99%
Medium high no. of obs. ^c	213	117	330
Share of total	25.98%	13.80%	19.78%
High no. of obs. ^d	38	239	277
Share of total	4.63%	28.18%	16.61%

^a Low = education level 1 (no or in education) and education level 2 (compulsory school) from the citizen survey and 1 (practical experience) and 2 (in education) from the farmer survey. ^b Medium low = education level 3 (vocational) baccalaureate, higher technical education) and 4 (higher vocational education) from the citizen survey and education level 3 (federal certificate of vocational education and training (EBA)), 4 (federal diploma of vocational education and training (EFZ)), 5 (federal diploma of professional education and training), and 9 (other education) from the farmer survey. ^c Medium high = education level 5 (higher technical or vocational education) from the citizen survey and education level 6 (advanced federal diploma of professional education and training) and 7 (college of professional education and training) from the farmer survey. ^d High = education level 6 (university of applied science or university of education) and 7 (university) from the citizen survey and education level 8 (bachelor's degree/master's degree or higher) from the farmer survey

questions were part of a bigger study that investigated the prioritisation of agricultural policy objectives by Swiss citizens (Ammann et al. 2024). Data were collected in October 2022. The results of the data analysed in this study from farmers and citizens reveal the perceptions of German- and French-speaking Switzerland, but not those of Italian-speaking Switzerland.²

Both surveys contained identical questions that respondents answered on a Likert scale from 1 (not important at all) to 7 (very important) on eight policy goals (see Fig. 1). More precisely, the survey asked, 'Imagine you could dispose of the agricultural budget in Switzerland. Please indicate for the following aspects how important they should be in the distribution of the agricultural budget (or subsidies)'. The aspects were the eight agricultural policy goals.

We assess whether farmers and non-farmers value agricultural policy goals similarly and identify the goals towards which the perceptions are most misaligned using three different empirical approaches. First, non-parametric Mann–Whitney U-tests are

² Robustness checks revealed that for some goals significant differences in the results between the German- and French-speaking regions exist (see supplementary material). Similar regional effects may exist in the Italian-speaking part of Switzerland, as it was found by El Benni et al. (2024a), but could not be tested.

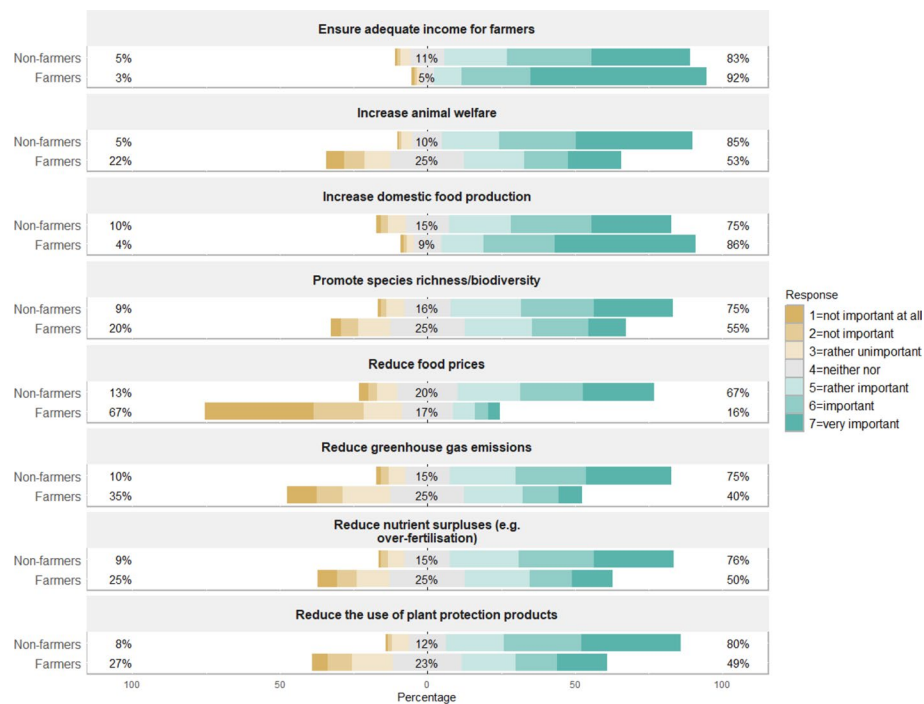


Fig. 1 Farmers' (N = 820) and non-farmers' (N = 848) perceptions of agricultural policy goals. *Note:* The percentage on the left represents respondents who find the goal very to rather unimportant (values 1–3). The percentage on the right represents those who find the goal rather important to very important (values 5–7). The percentages in the grey area indicate respondents who find the goal neither important nor unimportant (value 4)

used to test for mean differences in policy perceptions among farmers and non-farmers. Second, regression analysis is used to assess the robustness of mean value group comparisons when controlling for respondents' characteristics, i.e., age, gender, language region, and education. To further check the robustness of the regression results, we used different specifications of the outcome variables and models, respectively, which are shown in the supplementary material. Third, to measure the polarisation among farmers, non-farmers, and the whole sample (i.e., farmers and non-farmers) we calculate the consensus measure as defined by Claveria (2019):

$$\text{Cons} = \frac{\sqrt{(P - 33.3)^2 + (E - 33.3)^2 + (M - 33.3)^2}}{\sqrt{2/3}}$$

where P is the percentage of respondents who find the goal rather important to very important (Likert scale 5–7), E is the percentage of respondents who find the goal neither important nor not important (Likert scale value = 4), and M is the percentage of respondents who find the goal not important at all to rather unimportant (Likert scale 1–3). This consensus measure can take a value from 0 to 100%, with 100% indicating that one reply option draws all the responses and zero when the answers are equally among the three response categories. To check for the robustness of the consensus values we additionally used the measure of consensus for ordinal dispersion of Tastle and

Wierman (2007) and show the calculation and results of this measure in the supplementary material.

We present details on the surveys, empirical approaches, more detailed results, and results on the robustness checks in the supplementary material.

Results

Figure 1 shows the descriptive results of farmers and non-farmers perception of the eight considered agricultural policy goals. The majority of non-farmers consider all agricultural policy goals important, with the most important goal being animal welfare (85% indicating this as important and very important) and the least important being reduced food prices (67%). For farmers, the most important goal is ensuring adequate farmer income (92%), while reducing food prices is the least important (16%).

Group comparisons and regression analyses show that farmers and non-farmers differ significantly in their preferences for all agricultural policy goals. Farmers find agri-environmental goals significantly less important compared to non-farmers. Furthermore, farmers prioritise domestic food production and farmer income significantly more than non-farmers. Non-farmers, by contrast, consider reducing food prices to be important, which farmers do not. The results are robust across all regression analysis (see supplementary material).

For all agri-environmental goals, the consensus in the sample of farmers is much lower than in the sample of non-farmers (Fig. 2). Farmers disagree most strongly on the importance of reducing greenhouse gas emissions (consensus value = 13%, with 288 farmers consider the goal to be not at all important to rather unimportant, while 327

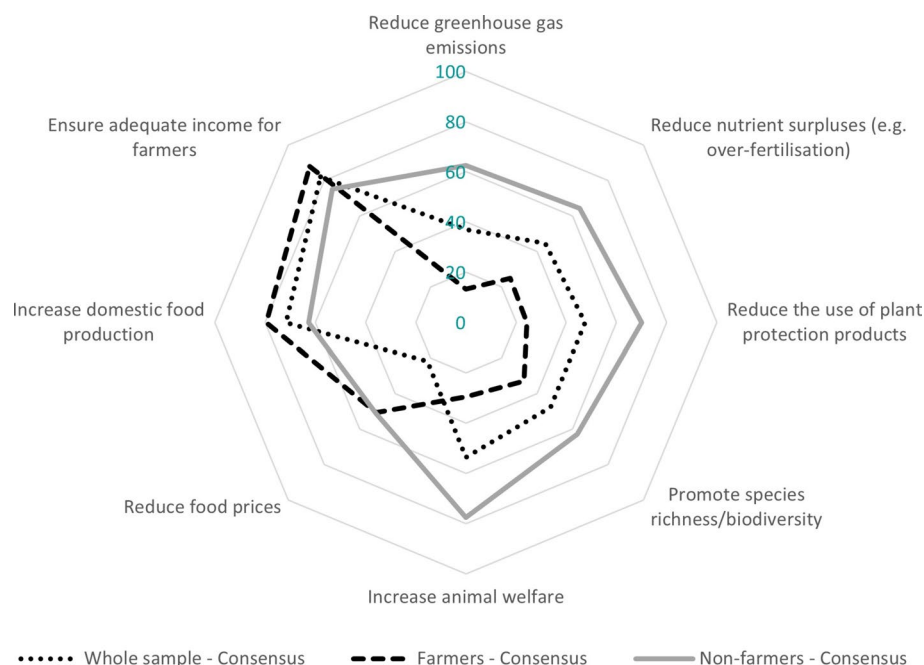


Fig. 2 (Dis)consensus within and between farmers' and non-farmers' perceptions of agricultural policy goals. Note: The consensus value can take values between 0 (complete disagreement) and 100% (complete agreement) (Claveria 2019)

farmers consider the goal to be rather important to very important). Among non-farmers, there is a high level of agreement on the importance of all eight agricultural policy goals. Agreement between farmers and non-farmers is highest for the goal of an adequate income for farmers and domestic food production. However, there is polarisation between farmers and non-farmers on the reduction of consumer prices (consensus value of the whole sample 22%), which results from an opposing assessment with a comparatively high consensus (51%) in both subsamples.

The robustness check comparing the results of the consensus values calculated following Claveria (2019) and Tastle and Wierman (2007) are similar and detailed results are shown in the supplementary material.

Discussion

In line with the findings of Howley et al. (2014), our results demonstrate a high level of consensus between farmers and citizens on the importance of policies that ensure domestic food production and an adequate income for farmers. Therefore, financial support for food production and ensuring an adequate income for farmers appears to be widely supported by the population. However, our results also show that, on average, non-farmer citizens rate environmental goals higher than farmers do. This is consistent with the findings of Tienhaara et al. (2020), who found that demand for ecosystem services from citizens exceeded what farmers could supply. Unlike Noack et al. (2024), we observe less pronounced discrepancies between the political preferences of citizens and farmers. The majority of citizens and farmers agree on the importance of animal welfare, promoting biodiversity, and reducing nutrient surpluses and pesticide residues. However, a significant preference gap emerges when it comes to reducing greenhouse gas emissions. The less pronounced differences in preferences for most agricultural policy goals could be attributed to Swiss citizens' heavy involvement in political processes, for example through popular initiatives and referenda (Huber and Finger 2019).

The two surveys were conducted at different times, which may have affected the responses due to changes in the agricultural policy debate. Nevertheless, no significant agricultural policy discussions occurred between October 2022 and August 2023 (e.g. related to popular initiatives or policy reforms). Therefore, we assume that the framework conditions for survey participants remained comparable. Please note that the way a survey is framed can influence the responses. The citizen survey focused on perceived trade-offs between agricultural policy goals, while the farmer survey focused on preferences for landscape features to promote biodiversity. As farmers with a stronger interest in biodiversity may have been more likely to volunteer for the survey, the importance of biodiversity in the sample may have been overestimated compared to the entire farming population.

When interpreting the results, consider that non-farmers probably know less about agricultural policy than farmers, even though it is a highly visible topic in Switzerland, with citizens regularly voting on popular initiatives in this area (Huber and Finger 2019). Furthermore, political preferences tend to change over time (Ekstrom and Federico 2019; Epstein et al. 1998; Lazer et al. 2010). Conducting longitudinal surveys to regularly collect data on political preferences can therefore be useful in aligning agricultural policy with public demand for the services provided by agriculture.

Conclusions

Our analysis provides important insights and entry points for policymakers. Firstly, using two complementary measures of (dis)consensus (Claveria 2019; Tastle and Wierman 2007), we revealed that farmers' perceptions of agricultural policy goals are more diverse than those of non-farmers. The high level of importance and consensus surrounding all agricultural policy goals among non-farmers suggests that agricultural policy should be oriented towards multiple objectives in order to support the multifunctional role of agriculture, thereby demonstrating its democratic legitimacy.

Secondly, our analysis shows that farmers do not all think the same way, particularly with regard to environmental objectives, especially those relating to reducing greenhouse gas emissions. Not all farmers oppose transforming the sector towards greater environmental sustainability, so the current suspension of key policy reforms is not fully justified from their perspective (see also Blattner et al. 2025). Agricultural policies should recognise this diversity by targeting and tailoring measures towards more sustainable food production. In order to balance the demand and supply of ecosystem services—such as increasing biodiversity or reducing residue in water bodies and other ecosystems—greater and more efficient allocation of agri-environmental payments may be necessary to compensate farmers for increased costs or foregone profits. This would also align with citizens' and farmers' preferences to achieve environmental goals while ensuring an adequate income for farmers. With regard to reducing greenhouse gas emissions, setting targets at the regional rather than farm level can be a more cost-effective measure, given the variation in mitigation costs across the farming population (Tarruella et al. 2025).

Thirdly, farmers and non-farmers disagree the most about reducing food prices and mitigating the negative environmental impact of agricultural production. By contrast, they agree most on securing farmers' incomes and domestic food production. Therefore, from a societal perspective, the transition to more environmentally and animal-friendly agricultural production must not come at the expense of food production or farmers' incomes, nor should it lead to a significant increase in consumer costs. Instead, policy solutions are needed to ensure that farmers are adequately remunerated for the public goods they provide to society, and not only through higher consumer prices. Other policies, such as trade and social policies, are also required to ensure consumers can afford a healthy, sustainable diet. For instance, reducing the Swiss seasonal tariff rate quotas on fruit and vegetables could lower the overall price level, making such produce more affordable for consumers (Hillen 2019). Options to increase healthy and sustainable consumption without necessarily reducing farmers' incomes include social support programmes for low-income households (Black et al. 2012), and changes to fiscal policies that increase prices for unhealthy food and decrease them for healthy food (Dogbe et al. 2024). A comprehensive food policy that promotes a more plant-based diet could eliminate existing trade-offs, thereby increasing self-sufficiency and reducing greenhouse gas emissions (Von Ow et al. 2020).

Data availability and materials

The dataset from the citizen survey analysed during the current study are available in the ETH Research Collection, <https://doi.org/10.3929/ethz-b-000647439>. The dataset from the farmers survey analysed during the current study are available from the corresponding author on reasonable request.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s40100-025-00402-5>.

Additional file 1.

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Author contributions

El Benni, Nadja: conceptualization, Formal analysis, Methodology, Visualization, Writing-original draft, Writing-review & editing. Finger, Robert: conceptualization, Writing-review & editing. Ammann, Jeanine: conceptualization, Writing-review & editing. Irek, Judith: conceptualization, Writing-review & editing. Kaiser, Antonia: data curation, Writing-review & editing, Project administration. Ritzel, Christian: conceptualization, Writing-review & editing. Wang, Yanbing: conceptualization, Writing-review & editing. Mack, Gabriele: conceptualization, Writing-review & editing.

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Declarations

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- Ammann J, Mack G, Irek J, Finger R, El Benni N (2023) Consumers' meat commitment and the importance of animal welfare as agricultural policy goal. *Food Qual Prefer* 112(105010):1–13
- Ammann J, Mack G, Irek J, Finger R, El Benni N (2024) Data on Swiss citizens' preferences and perceptions of agricultural policy. *Data Brief* 52(110042):1–10
- Biedny C, Malone T, Lusk JL (2020) Exploring polarization in US food policy opinions. *Appl Econ Perspect Policy* 42:434–454
- Black AP, Brimblecombe J, Eyles H, Morris P, Vally H, O'Dea K (2012) Food subsidy programs and the health and nutritional status of disadvantaged families in high income countries: a systematic review. *BMC Public Health* 12(1099):1–24
- Blattner CE, Finger R, Ingold K (2025) Why farmers are beginning to take their government to court over climate change. *Nature* 637(8048):1050–1052
- Claveria O (2019) Forecasting the unemployment rate using the degree of agreement in consumer unemployment expectations. *J Labour Market Res* 53:1–10
- Dogbe W, Akaichi F, Rungapamestry V, Revoredo-Giha C (2024) Effectiveness of implemented global dietary interventions: a scoping review of fiscal policies. *BMC Public Health* 24(2552):1–27
- Dueri S, Mack G (2024) Modeling the implications of policy reforms on pesticide risk for Switzerland. *Sci Total Environ* 928:1–12
- Ekstrom PD, Federico CM (2019) Personality and political preferences over time: evidence from a multiwave longitudinal study. *J Personality* 87(2):398–412
- El Benni N, Irek J, Finger R, Mack G, Ammann J (2024a) Citizens' perceptions of agricultural policy goals - evidence from Switzerland. *Food Policy* 125(102643):1–21
- El Benni N, Finger R, Irek J, Mack G, Ammann J (2024b) No evidence of a rural-urban divide in prioritizing agricultural policy goals. *Appl Econ Perspect Policy*. <https://doi.org/10.1002/aepp.13485>
- Epstein L, Hoekstra V, Segal JA, Spaeth HJ (1998) Do political preferences change? A longitudinal study of US Supreme Court justices. *J Polit* 60(3):801–818
- Finger R, Fabry A, Kammer M, Candel J, Dalhaus T, Meemken EM (2024) Farmer protests in Europe 2023–2024. *Euro-Choices* 23(3):59–63
- Fisher DR, Nasrin S (2020) Climate activism and its effects. *Wires Clim Change* 12(1):1–11
- FOAG (2023) Zukünftige Ausrichtung der Agrarpolitik. Bericht des Bundesrates in Erfüllung der Postulate 20.3931 der WAK-S und 21.3015 der WAK-N. Federal Office for Agriculture. Bern. Retrieved from <https://www.blw.admin.ch/blw/de/home/politik/agrarpolitik/postulat.html>
- FOAG, BLV, BAFU. (2023) Klimastrategie Landwirtschaft und Ernährung 2050. Verminderung Treibhausgasemissionen und Anpassung an die Folgen des Klimawandels für ein nachhaltiges Schweizer Ernährungssystem. 1. Teil: Grundsätze, Ziele und Stossrichtungen. Bundesamt für Landwirtschaft, Bundesamt für Lebensmittelsicherheit und Veterinärwesen & Bundesamt für Umwelt, Bern.
- Hillen J (2019) Market integration and market efficiency under seasonal tariff rate quotas. *J Agric Econ* 70(3):859–873
- Howley P et al (2014) Contrasting the attitudes of farmers and the general public regarding the 'multifunctional' role of the agricultural sector. *Land Use Policy* 38:248–256
- Huber R, Finger R (2019) Popular initiatives increasingly stimulate agricultural policy in Switzerland. *EuroChoices* 18:38–39

- Huber R, El Benni N, Finger R (2024) Lessons learned and policy implications from 20 years of Swiss agricultural policy reforms: A review of policy evaluations. *Bio-Based and Appl Econ* 13:121
- Kaiser A, Wang Y, Klein N, Mack G, Ritzel C (2025) Landscape features on farms: evidence on factors influencing their quantity and ecological value. *Ecol Econ* 235(108646):1–26
- Lazer D, Rubineau B, Chetkovich C, Katz N, Neblo M (2010) The coevolution of networks and political attitudes. *Polit Commun* 27(3):248–274
- Mack G, Ritzel C, Heitkamp K, El Benni N (2020) The effect of administrative burden on farmers' perceptions of cross-compliance-based direct payment policy. *Public Adm Rev* 81:664–675
- Mack G, Finger R, Ammann J, El Benni N (2023) Modelling policies towards pesticide-free agricultural production systems. *Agric Syst* 207(103642):1–18
- Matthews A (2023) Food price situation in Europe. *Stud Agric Econ* 125:60–68
- Matthews A (2024) Farmer protests and the 2024 European Parliament elections. *Intereconomics* 59:83–87
- Mittenzwei K et al (2023) Perceived effects of climate policy on rural areas and agriculture: a rural-urban-divide. *J Rural Stud* 100(103001):1–12
- Navarro A, López-Bao JV (2018) Towards a greener common agricultural policy. *Nat Ecol Evol* 2(12):1830–1833
- Noack ME, Tietjens F, Latacz-Lohmann U (2024) Views and opinions of farmers and consumers on the trajectory of agriculture in times of military conflict: insights from a Q-study in Germany. *Q Open* 4(q0ae005):1–25
- Pe'er, G. et al. (2019) A greener path for the EU Common Agricultural Policy. *Science*. 365: 449–451.
- Tarruella M, Huber R, Mack G, El Benni N, Finger R (2025) Cost-effectiveness of farm- vs. regional-level climate change mitigation policies. *Q Open* 5(1):1–19
- Tastle WJ, Wierman MJ (2007) Consensus and dissent: a measure of ordinal dispersion. *Int J Approx Reason* 45:531–545
- Tienhaara A et al (2020) Demand and supply of agricultural ES: towards benefit-based policy. *Eur Rev Agric Econ* 47:1223–1249
- Tosun J, Schaub S, Marek C (2023) Europeans' attitudes toward the goals of agricultural policy: a case of rural–urban divide? *Polit Stud Rev* 22:174–192
- Van Straalen NM, Legler J (2018) Decision-making in a storm of discontent. *Science* 360:958–960
- Von Ow A, Waldvogel T, Nemecek T (2020) Environmental optimization of the Swiss population's diet using domestic production resources. *J Clean Prod* 248(119241):1–15
- Winter C (2005) Preferences and values for forests and wetlands: a comparison of farmers, environmentalists, and the general public in Australia. *Soc Nat Resour* 18:541–555

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